# BETTER PO EVERYONE



FOR YOUR HERD

FEWER DAYS OF ANTIBIOTIC TREATMENT, LESS TIME SPENT IN THE HOSPITAL PEN.



FOR YOUR BUSINESS

REQUIRES LESS LABOR, CUTS DOWN ON COSTS.



FOR THE CONSUMER

ANTIBIOTICS USED JUDICIOUSLY INCREASES CONSUMER CONFIDENCE.

	TODAY® (CEPHAPIRIN SODIUM)	SPECTRAMAST® LC (CEFTIOFUR HYDROCHLORIDE)
POUNDS OF MILK PER DAY	70 POUNDS <sup>5</sup>	<b>70</b> POUNDS <sup>5</sup>
7 DAYS OF MILK DISCARD	4.5 DAYS	DAYS
TOTAL POUNDS OF MILK DISCARD	315 POUNDS	490 POUNDS
VALUE OF TOTAL MILK DISCARD (\$17.50/CWT)	\$55.12	\$85.75
YALUE OF TUBES	2 @ \$3.33 <sup>6</sup> = \$6.67	5 @ \$5.25° = \$26.25
TOTAL TREATMENT SPEND PER COW	\$61.79	\$112.00
TOTAL COST ON A 1,000-COW DAIRY WITH A 30% MASTITIS OCCURRENCE <sup>3</sup>	\$18,537	\$33,600

# EXTENDED THERAPY TREATMENTS CAN EXTEND YOUR COSTS, TOO.

Studies show there is no difference in clinical cure among all pathogens between ToDAY® (cephapirin sodium) and Spectramast® LC (ceftiofur hydrochloride).¹ So why throw your dollars at extended therapies when you can expect the same cure rates in less time with the two-tube, one-day treatment of ToDAY?















<sup>&</sup>lt;sup>1</sup> Schukken YH, Zurakowski MJ, Rauch BJ, et al. Non-inferiority trial comparing a first-generation cephalosporin with a third-generation cephalosporin in the treatment of non-severe clinical mastitis in dairy cows. *J Dairy Sci* 2013;96(10):6763–6774.

4 Cortinhas CS, Oliveira L mastitis pathogens. *Am* mastitis pathogens. *Am* 

<sup>&</sup>lt;sup>2</sup> Vasquez AK, Nydam DV, Capel MB, et al. Clinical outcome comparison of immediate blanket treatment versus a delayed pathogen-based treatment protocol for clinical mastitis in a New York dairy herd. J Dairy Sci 2016;100:1–12.

<sup>&</sup>lt;sup>3</sup> Smith G, Gehring R, Riviere J, et al. Elimination kinetics of ceftiofur hydrochloride after intramammary administration in lactating dairy cows J Am Vet Med Assoc 2004;224(11):1827–1830.

<sup>&</sup>lt;sup>4</sup>Cortinhas CS, Oliveira L, Ruegg P, et al. Minimum inhibitory concentrations of cephalosporin compounds and their active metabolites for selected mastitis pathogens. Am J Vet Res 2013;74(5):1–8.

<sup>&</sup>lt;sup>5</sup>Steady milk production continues. *Hoard's Dairyman* 2012;149.

<sup>&</sup>lt;sup>6</sup> Price taken from Valley Vet December 2019.

<sup>&</sup>lt;sup>7</sup>Hess JL, Neuder LM, Sears PM. Rethinking clinical mastitis therapy, in *Proceedings*. 42nd Annual Meeting, National Mastitis Council 2003;372–373.

As a dairy producer, your time is valuable. Fortunately, treating mastitis with ToDAY® (cephapirin sodium) means you can be efficient with it. A short-duration therapy also means using less antibiotics. And that's simply better for everyone.

## NOT ALL MASTITIS CASES SHOULD BE TREATED EQUAL.

Culturing is an effective method for differentiating the cases that will respond to antibiotics from the ones that won't.

### DISTRIBUTION OF INFECTIONS<sup>1</sup>

#### **GRAM-POSITIVE**

When you focus treatment on the only type of mastitis that responds to antibiotics, Gram-positive, you can greatly reduce your overall antibiotic usage.<sup>2</sup>

### **GRAM-NEGATIVE**

Many mastitis cases are caused by Gram-negative pathogens, which will self-cure within 24 hours without antibiotic treatment.<sup>2</sup>

# Gram-Positive 38% Other 9% Gram-Negative 25% No Growth 28% ill

### LESS ANTIBIOTICS. SAME CURE RATES.

Using a two-tube treatment of ToDAY reduces antibiotic use without sacrificing efficacy.

The bacteriological cure for non-severe Gram-positive pathogens was 68 percent for a 12-hour treatment with ToDAY and 67 percent for a five-day treatment with Spectramast® LC (ceftiofur hydrochloride).¹

CONCLUSION: NO DIFFERENCE IN CLINICAL CURE <sup>1</sup>					
CURE RATES FROM 184 CASES WITH COMPLETE OBSERVATIONS	ToDAY	62%			
	SPECTRAMAST LC	62%			
CLINICAL CURE BY INFECTION; GRAM-POSITIVE	ToDAY	65%			
	SPECTRAMAST LC	62%			
CLINICAL CURE BY INFECTION;	ToDAY	56%			
GRAM-NEGATIVE	SPECTRAMAST LC	44%			

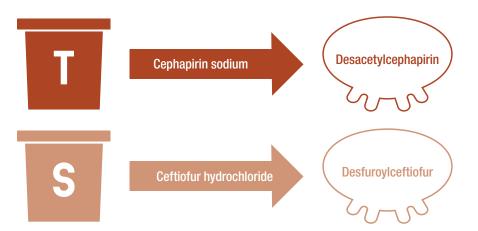
Clinical Cure: Milk and udder returning to normal 14 days after the last treatment and remaining normal at the 21-day point.

**ToDAY RESIDUE WARNINGS:** Milk that has been taken from animals during treatment and for 96 hours after the last treatment must not be used for food. Treated animals must not be slaughtered for food until 4 days after the last treatment. Administration of more than the prescribed dose may lead to residue of antibiotic in milk longer than 96 hours.

### PROVEN EFFICACY.

ToDAY's efficacy has been proven by multiple head-to-head trials.

Antibiotics perform differently once they are administered in the cow than when they're tested in a lab. When an antibiotic is administered into the udder — in vivo — the active ingredient begins to metabolize into a new compound,<sup>3</sup> desacetylcephapirin (DAC), for ToDAY, and desfuroylceftiofur (DFC) for Spectramast® LC (ceftiofur hydrochloride).



### BOTH PARENT COMPOUNDS WERE EFFECTIVE WHEN TESTED IN A LAB.4

Active Ingredient in Vitro		ToDAY		SPECTRAMAST LC			
		S	I	R	S	I	R
Staph aureus	Clinical %	100			100		
	Subclinical %	100			100		
CNS	Subclinical %	100			97	2	1
E. coli	Clinical %	51	29	20	95	3	2
Strep dysgalactiae	Clinical %	100			100		
	Subclinical %	100			100		
Strep uberis	Clinical %	100			94	2	4
	Subclinical %	100			94	4	2

### BUT WHEN THE METABOLITES WERE TESTED, SPECIFIC GRAM-POSITIVE ORGANISMS WERE MORE SENSITIVE TO CEPHAPIRIN'S METABOLITES.4

Metabolite Compound in Vitro		Desacetylcephapirin			Desfuroylceftiofur		
		S	- 1	R	S	- 1	R
Staph aureus	Clinical %	100			8	58	34
	Subclinical %	100			2	28	70
CNS	Subclinical %	100			34	46	20
E. coli	Clinical %			100	91	0	9
Strep dysgalactiae	Clinical %	100			100		
	Subclinical %	100			100		
Strep uberis	Clinical %	100			94	2	4
	Subclinical %	100			90	8	2

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ToDAY has been shown to be efficacious in the treatment of mastitis in lactating cows caused by susceptible strains of *streptococcus agalactiae* and *staphylococcus aureus* including strains resistant to penicillin.

### LESS MILK DUMPED MEANS MORE IN THE TANK.

A 12-hour, two-tube treatment of ToDAY can reduce the time cows spend in the hospital pen by 35 percent when compared to 5 tubes of SPECTRAMAST LC given over 5 days.



